



Docket No.: 2114-0116PUS1

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Hiroyuki ASANUMA et al.

Application No.: 10/590,777

Confirmation No.: @@@

Filed: August 25, 2006

Art Unit: N/A

For: DNA ENZYME AND METHOD FOR

CONTROLLING ACTIVITY THEREOF

Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (SUBMISSION AFTER FILING OF AN APPLICATION BUT BEFORE FINAL REJECTION OR NOTICE OF ALLOWANCE OR CONCURRENTLY WITH A RULE 1.114 RCE APPLICATION)

- Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. <u>LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION</u>

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s), attached hereto.

II. COPIES

a. Copies of cited U.S. patents and patent application publications are not included.

Copies of foreign patent documents and non-patent literature are included.

Application No.: 10/590,777 Docket No.: 2114-0116PUS1 b. Some or all of the documents listed on the PTO-SB08 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned. c. REFERENCES PREVIOUSLY CITED OR SUBMITTED - Pursuant to 37 C.F.R. §1.98(d), consideration of information listed on the PTO-SB08 form(s) is requested since any patents, publications, or other information which are listed on the PTO-SB08 form(s) but for which copies are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120: U.S. Appl. No(s) and U.S. Filing Date III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box) a. DOCUMENTS IN THE ENGLISH LANGUAGE - The patents, publications, or other information listed on the attached PTO SB08 are in the English language and therefore, do not require a statement of relevancy. X b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE - A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows: Hiroyuki ASANUMA; Journal of Japanese Society for Biomaterials; Artificial regulation of gene-expression; pp. 290-296 is discussed on page 3 of the present specification. \Box c. ENGLISH LANGUAGE SEARCH REPORT - An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

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Application N	No.: 10/590,777	Docket No.: 2114-0116PUS1
d.	OTHER - The following additional inform.	mation is provided for the Examiner's
IV. <u>FEES</u>	(check one box)	
a. of a new pate	This Information Disclosure Statement is nt application; therefore, no fee is required.	being filed concurrently with the filing
b. a continuation	This Information Disclosure Statement is n-in-part, continuation, or divisional patent a	_
	This Information Disclosure Statement is a national application (37 C.F.R. § 1.97() is not to be used with RCE's.)	
	This Information Disclosure Statement is of the national stage as set forth in § 1.491 in No fee or statement is required.	•
e. of a Request statement is re	This Information Disclosure Statement is for Continued Examination under § 1.11 equired.	
that a first Of § 1.97(c) and	This Information Disclosure Statement is n the merits (37 C.F.R. § 1.97(b)(3)). No fee fice Action on the merits has been issued, possee the statement under 37 C.F.R. § 1.97 our deposit account for the fee as required by	the or statement is required. In the event blease consider this IDS under 37 C.F.R. (e) below, or, if no statement has been
	This Information Disclosure Statement is Action under 37 C.F.R. § 1.113 (See 37 C.f. ce of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.311)	F.R. § 1.97(c)(1)) or before the mailing

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Application No.: 10/590,777 Docket No.: 2114-0116PUS1 No statement; therefore, a fee as required by 37 C.F.R. § 1.17(p) is attached. or See the statement below. No fee is required. V. STATEMENT UNDER 37 C.F.R. § 1.97(e) (check only one box) The undersigned hereby states that: Each item of information contained in the IDS was first cited in any a. communication from a foreign Patent Office in a counterpart foreign application not more than 30 days prior to the filing of this IDS; or b. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the IDS. d. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable

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inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months

prior to the filing of this statement.

VI. PAYMENT OF FEES (check one box)

The required fee is listed on the attached Fee Transmittal.

No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated:

NOV 2 7 2006

Respectfully submitted,

Marc S. Weiner

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Attachment(s):

Documents

NOV 2 7 2006

PTO/SB/08A/B (09-06)

Approved for use through 03/31/2007. OMB 0651-0031 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

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Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/590,777
IN	FORMATIC	N DI	SCLOSURE	Filing Date	August 25, 2006
STATEMENT BY APPLICANT (Use as many sheets as necessary)			APPLICANT	First Named Inventor	Hiroyuki ASANUMA
				Art Unit	N/A
			necessary)	Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	2114-0116PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	CA	Stephen W. SANTORO et al.; A general purpose RNA-cleaving DNA enzyme; Proc. Natl. Acad. Sci.; Vol. 94, pp. 4262-4266, April, 1997	
	СВ	Hiroyuki ASANUMA et al.; Photo-Responsive Oligonucleotides Carrying Azobenzene in the Side-Chains; Tetrahedron Letters; No. 39, pp. 9015-9018, 1998.	
	СС	Masayuki ENDO et al.; Molecular Design for a Pinpoint RNA Scission. Interposition of Oligoamines between Two DNA Oligomers; J. Org. Chem.; No. 62, pp. 846-852, 1997.	
	CD	Hiroyuki ASANUMA et al.; Enantioselective Incorporation of Azobenzenes into Oligodeoxyribonucleotide for Effective Photoregulation of Duplex Formation; Angew. Chem. Int. Ed. 40, No. 14, pp. 2671-2673, 2001.	
	CE	Hiroyuki ASANUMA; Artificial regulation of gene-expression; Journal of Japanese Society for Biomaterials; Vol. 21, pp. 290-296, July 2003.	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /JDS/

Signature 70d Title 5 Oct 11/11/2009 Considered	Examiner Signature /James Schultz/	Date
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Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.